

**Environmental Baseline Survey**  
**Environmental Chemistry Branch Laboratory Building**  
420 South 18th Street  
Omaha, Nebraska



Pre-1947



2007

Prepared by Omaha District  
U.S. Army Corps of Engineers  
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## EXECUTIVE SUMMARY

The environmental condition of the former Environmental Chemistry Branch Laboratory building at 420 South 18th Street, Omaha, Nebraska, is Type 1 – no release or disposal of hazardous substances or petroleum products or their derivatives has occurred. The building is situated on the northwest corner of 18th and Howard St and extends approximately ½ the distance north to Harney Street and approximately ¼ the distance west to 19th Street. The target site building was constructed in 1920 and had been used by two auto dealerships and from 1948 to present has been used as an environmental geotechnical and analytical testing laboratory, office space, storage, and machine maintenance.

This Environmental Baseline Survey (EBS) completed the following activities:

- Collection and review of available environmental databases
- An inspection of the building, including pictures of the property at South 18th Street, Omaha, Nebraska.
- Interview with key site personnel
- Historical and aerial photos and property title and lien search.

The objective of the EBS is to document certain elements of the condition of the federal real property for acquisition, transfer, lease, sale, or any other disposition. This EBS is based on information obtained through records search, interviews, photography of the area, and the visual site inspections in January 2007. The information reviewed to prepare this EBS was obtained from standard historical use and environmental record sources as required in the American Society for Testing and Materials (ASTM) Standard D 6008-96 (Reapproved 2005) or “Standards and Practices for All Appropriate Inquiries” (40 CFR Part 312). A regulatory database search at the federal and state levels was supplied by EDR, Inc., (appendix B) for records on both the Lab building and adjacent properties.

The EBS shows that there are no hazardous substances or petroleum products or their derivatives stored for one year or more, released to the environmental, or disposed at Lab building. All chemicals used in the analytical processes and remaining environmental samples have been removed for proper disposal. There is no history of military ordnance or explosives associated with the processes at the site. The former ECB Lab was licensed to store instruments using sealed radioactive sources which have been removed and the license terminated.

Asbestos abatement has been performed in the basement and on the first floor. The fourth floor, which was a store room until the analytical laboratory was built in 1987, has no record of having asbestos issues. However, the building construction was performed within the time frame that asbestos was used so it can be assumed that the remainder of the building may obtain some asbestos. The age of the building gives indications that lead based paint may be present in the building. No record of asbestos, lead based paint, or radon surveys were found for this building.

Inspection of the building has shown evidence of what appears to be machine lubricant leaks associated with equipment in the building basement and the freight elevator motors. No record or

physical evidence of a UST associated with the former automobile dealership businesses was found

Records search of the surrounding properties was performed to determine what, if any, of these properties would have an effect on the target site. The Omaha Lead Superfund Site, which is on the National Priority List (NPL), is within the one mile radius of the Lab building. The building is within the extent of the airborne lead contamination that has been accumulating on the surrounding area. Since this is an enclosed building the lead fallout should have no effect on the target property. The Union Pacific site is also within the mile radius of the target site and it is identified as having associated groundwater contamination. Records show that the contamination is contained and does not affect on the Lab building. Several other areas or facilities within the mile radius of the building are recorded in regulatory databases. These include several small quantity hazardous waste generators, landfills, underground storage tanks (USTs), dry cleaners, and a former gas manufacturing plant. Several domestic source wells are within the area but none is associated with the target site.

# **1 AUTHORITY AND PURPOSE OF THE ENVIRONMENTAL BASELINE SURVEY**

## **1.1 Introduction**

The purpose of this Environmental Baseline Survey (EBS) is to determine the environmental condition of the building at 420 South 18th Street, Omaha, Nebraska. The building is formerly the Environmental Chemistry Branch Laboratory building, a U.S. Army Corps of Engineers (USACE) quality assurance analytical laboratory that closed 5 January 2007. The EBS was based on existing environmental information related to storage for one year or more, release into the environment, or disposal on the property selected for transfer of hazardous substances or petroleum products or their derivatives. This information was used to determine or discover the obviousness of the presence or likely presence of a release or threatened release of any hazardous substance or petroleum product. The EBS also used information from surrounding property to determine its effect on the property selected for transfer.

## **1.2 Purpose of the Survey**

The primary objective of the EBS is to document certain elements of the condition of the federal real property for acquisition, transfer, lease, sale, or any other disposition. Sufficient information must be developed to ensure adequate protection of human health and the environment. The EBS determines if hazardous substances were stored for 1 year or more, released into the environment or structures, or disposed of on the property selected for transfer and document the fulfillment of environmental “due diligence” as appropriate. Hazardous substances are defined in 42 USC 9601(14). The EBS also focuses on other regulated hazards such as polychlorinated biphenyls, petroleum products and their derivatives, asbestos, radon, lead based paint, and unexploded ordnance.

This EBS is based on information obtained through records search, interviews, photography of the area, and the visual site inspections in January 2007. The information reviewed to prepare this EBS is obtained from standard historical use and environmental record sources as required in the American Society for Testing and Materials (ASTM) Standard D 6008-96 (revised 2005) “Standard Practice for Conducting Environmental Baseline Surveys”. The appropriate federal and state environmental databases were searched by zip codes and street addresses, when available, in order to identify both the project site and neighboring properties.

## **1.3 Boundaries of the Survey Area**

The property to be investigated is a building at 420 South 18th Street, Omaha, Nebraska. The building is situated on the northwest corner of 18th and Howard St and extends approximately ½ the distance to Harney Street and approximately ¼ the distance to 19th street to the west. The building is a reinforced concrete structure built in 1920. The exterior is brick masonry with some stone masonry on the ground level. The building consists of seven levels (Appendix C):

- Basement level is 11,250 square feet,
- First floor level is 11,250 square feet,

- Mezzanine level is 1,728 square feet,
- Second floor level is 11,250 square feet,
- Third floor level is 11,250 square feet,
- Fourth floor level is 11,250 square feet,
- Roof is 11,250 square feet.

The coordinates for the site are as follows; see Appendix B, Number 1 (EDR Radius Map with Geo-Check®, page 1):

#### COORDINATES

Latitude (north):	41.256300-41° 15' 22.7"
Longitude (west):	95.939800-95° 56' 23.3"
Universal Transverse Mercator:	Zone 15
UTM X (Meters):	253697.6
UTM Y (Meters):	4571166.0
Elevation:	1084 ft. above sea level

The property was originally part of the KOUNTZE -E- RESERVE, and the legal description of the building is "The East Seventy-five (E 75) feet of Lots one (1) and two (2), and the East Seventy-five (E 75) feet of the North Sixty-one and sixty-six hundredths (N 61.66) feet of lot three (3), all in Block Two (2) in E. Kountze Reserve, an Addition to the City of Omaha, as Surveyed, plotted and Recorded." The property is currently owned by U.S. Army Corps of Engineers.



## **2 SURVEY METHODOLOGY APPROACH AND RATIONALE**

### **2.1 Description of Records Reviewed**

The following activities were completed:

- A review of existing reported information (listed in section 2.1.1).
- A review of applicable federal and state regulatory agency reports produced in accordance with CERCLA, the Resource Conservation and Recovery Act (RCRA), and the Solid Waste Disposal Act (SWDA).
- A review of land title records and available aerial photographs, building department or land use records.
- Warranty-Deed of property from 1914 until purchased by the US Government in 1948 was obtained from the Register of Deeds, Douglas County, Nebraska.

#### **2.1.1 Environmental Databases and Other Regulatory Inquiries**

A search of available environmental and historical records of the target and surrounding property was conducted by EDR. The search consisted of documentation of Federal, State, and Local records on the latitude/longitude coordinates of the building to be transferred or sold. The EDR report search consists of:

- The EDR Radius Map with Geo-Check® (search of available environmental records) Appendix B, Number 1.
- EDR Sandborn® Map Report (Fire Insurance Maps) Appendix B, Number 2.
- The EDR-City Directory *Abstract* (business directories) Appendix B, Number 3.
- The EDR Aerial Photo Decade Package, consisting of USGS Aerial Photography 5 Package (CD of Aerial Photos of the Target site and surrounding area for the five separate years). See Appendix D.
- EDR Historical Topographic Map Report (aerial street map of the surrounding target site area) Appendix B, Number 4.
- The EDR Environmental LienSearch<sup>(TM)</sup> Report (shows that there are no environmental liens on the Lab Building title) Appendix B, Number 5.

#### **2.1.2 Photographs**

Aerial photographs were obtained of the site from five separate years, see Appendix D, EDR Aerial Photo as obtained from USGS. The 2006 aerial Photograph was obtained from the Douglas County Assessor Office

1949 at 5833 feet  
1968 at 2000 feet  
1975 at 3000 feet  
1982 at 6666 feet  
1994 at 3333 feet.

2006 from DCA Office.

### **2.1.3 Sanborn Image File**

EDR Sanborn® Map Report (Fire Insurance map drawings for five different years, Appendix B, Number 2 gives drawings of the target site and surrounding area.

### **2.1.4 City Directory**

EDR's City Directory Abstract is a screening report designed to assist in evaluating potential liability on a target property resulting from past activities.

## **2.2 Personnel Interviews**

Key people provided information about local history and area locations that the surveyors used to focus the ground survey and identify potential environmental liabilities in the survey area. The interviewees who contributed to this EBS are listed in the table below. The surveys from the interviewees are given in Appendix E.

**Table 1 Personnel Interviewed**

Interviewee	Title	Years at Laboratory
Doug Taggart	Laboratory Director	1990 - 2007
David Splichal	Supervisor Organic Chemistry Analyses	1987 - 2007
Prem Arora	Supervisor Inorganic Chemistry Analyses	1985 - 2007
Steve Schnitker	Explosives Analyst	1992 - 2007
Joe Solsky	Laboratory Director, Chief Chemist	1984 - 1990
Sandi Zebrowski	Regulatory specialist at HTRW CX	
Rick Donovan	Past Laboratory Director	Pre 1984

## **2.3 Property Inspection**

A building walkthrough was performed by Soren P. Sorensen and Marc Anderson of the U.S. Army Corps of Engineers in January 2007. This consisted of an inspection of the basement, mezzanine, the four floors, and the roof. Photographs taken where appropriate and are included in Appendix F.

## **2.4 Environmental Sampling**

No environmental samples were collected for the EBS.

### **3 FINDINGS FOR SITE**

#### **3.1 History and Current Use**

The Lab building was built in 1920 and was an Oldsmobile automobile dealership in the 1920s and a Hudson automobile dealership in the late 1940s. The U.S. Government subsequently obtained ownership of the property on 28 June 1948. From that time to the present the site was used as a government chemistry quality assurance and testing laboratory. The lab has changed commands, names, and missions since it opened in the early 1950s. Most recently the Lab building was the Environmental Chemistry Branch Laboratory for USACE's Engineer Research and Development Center (ERDC), headquartered in Vicksburg, MS. It has been a geotechnical testing laboratory, paint analysis laboratory, concrete aggregate research and testing laboratory, office space, machine maintenance, equipment and files storage, and recently an environmental analytical production and quality assurance laboratory. Features of the lab are shown on the Schematic Floor Plans diagrams in Appendix C.

The EDR City Directory *Abstract* (Appendix B, Number 3) shows the U.S. Army Corps of Engineers has occupied the Lab building since 1961, as far in history as the abstract is available. Occupants of some the adjacent buildings have changed over the years covered by the Abstract. The EDR Sanborn® Map Report (Appendix B, Number 4) includes fire insurance maps for the years 1887, 1890, 1901, 1934, 1962, and 1969, and show that the building was built between 1901 and 1934 and most of the currently existing adjacent buildings were built before 1934. Aerial photographs dating back to 1949 (Appendix D) show the Lab building in downtown Omaha and very little land use change except for building an interstate system in the 1960s.

#### **3.2 Database Review**

Regulatory database searches at the federal and state levels were supplied by EDR, Inc. (Appendix B). The EDR Radius Map with Geo-Check® report (Appendix B1) lists 94 databases query results, including thirty-one federal, twenty-nine state, sixteen Tribal, one proprietary, and seventeen other databases for records about the target site and minimum search distances around it. The former Lab is listed in seven environmental databases.

- MLTS (Material Licensing Tracking System)
- PADS (PCB Activity Database)
- CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System)
- RCRA-SQG (Resource Conservation and Recovery Act-Small Quantity Generator)
- FINDS (Facility Index System/Facility Registry System)
- NE BROWNFIELDS (Nebraska Potential Bownfields inventory listing)
- WI MANIFEST (Wisconsin Manifest Information)

#### **3.3 Environmental Setting**

### 3.3.1 Land Use

The building is within downtown Omaha and is surrounded by office buildings, parking lots and garages, streets, and pedestrian thoroughfares. The building is listed in the NE BROWNFIELDS database as a potential brownfields, as is much of downtown Omaha. The Nebraska Department of Environmental Quality (NDEQ) uses a broad-based approach to capture all potential brownfields sites. A preliminary Survey and Inventory of Brownfields Sites in Nebraska was constructed based on previously submitted information including sites named specifically by city representatives. The list was built on facility characteristics, which were founded on previous, broad-based contamination experience.

### 3.3.2 Topography

The Lab building is located at Latitude (north): 41.25630 – 41° 15' 22.7" Longitude (west): 95.9398 – 95° 56' 23.3". The elevation is 1084 ft. above sea level. The Topographic Elevation Profile in Appendix B, Number 4 shows that there is a decline from north to south and a decline from west to east.

### 3.3.3 Soils and Geology

EDR Radius Map with Geo-Check®, Appendix B, Number 1, page A-4 and A-5 shows that the soil texture class to 60 inches is silt-clay loam, and below that is bedrock. The soils have a moderate water infiltration rate, which indicates moderately well and well drained soils with moderately coarse textures.

### 3.3.4 Surface and Groundwater

Groundwater flow is generally to the east towards the Missouri River. Surface water will flow according to localized surface slope, however the entire area is covered by sidewalks and roads and the surface water is channeled into road gutters and storm water sewers.

## 3.4 Warranty Deed and Environmental Lien Search

### 3.4.1 Warranty Deed Search

Records were reviewed at the Register of Deeds Office in Omaha, Nebraska for title information on the target property. The legal description of property is:

The East Seventy-five (E 75) feet of Lots one (1) and two (2), and the East Seventy-five (E 75) feet of the North Sixty-one and sixty-six hundredths (N 61.66) feet of lot three (3), all in Block Two (2) in E. Kountze Reserve, an Addition to the City of Omaha, as surveyed, plotted, and recorded. Historical Warranty Deed Records were obtained as given below:

**Table 2 Deed History**

Deed Reference*	Seller	Buyer	Date of Transaction
385-368, 369, 370	Elizabeth Kountze Real Estate Co.	Sterling Realty Co.	17 June 1914

Deed Reference*	Seller	Buyer	Date of Transaction
437-500, 501	Sterling Realty Co.	Leo J Dunn and Charles A Tucker	21 Nov 1919
466-344, 345	Leo J Dunn and Charles A Tucker	Nebraska Oldsmobile Co.	22 August 1922
528-100, 101	Nebraska Oldsmobile Co.	Charles A Tucker and Howard J Dunn	30 June 1925
574-150 And 574-155	Howard J and Dorothy Dunn (1/2) of property and Charles A Tucker and wife (1/2) of property	Bertha J Anderson	20 June 1929 21 June 1929
577-508	Bertha J Anderson	Albin W Bloom and Alfred H Erickson	28 June 1929
774-669, 774-670	Bloom-Erickson Investment Co.	Matthews Investment Co.	1 March 1946
812-541	Matthew Investment Co	Campbell Motors Co	16 June 1947
835-435	Campbell Motor Co	Colin J Campbell	28 May 1948
837-668	Colin J and Bernice M Campbell	United States of America	29 June 1948

\* Register of Deeds, Douglas County, Nebraska

The warranty deeds given in the above table gives the record of ownership of the target property from the time it was undeveloped land. Copies of the warranty deeds are given in Appendix G.

### 3.4.2 Environmental Lien Search

EDR Environmental LienSearch™ using AMERISTAR Information Network, Ltd. (Appendix B, Number 5) indicates that there are no environmental liens on the property title.

## 3.5 Hazardous Substances

### 3.5.1 CERCLA Discovery

CERCLIS is the database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazards waste sites, including an inventory of sites, planned and actual site activities, and financial information. CERCLIS Site ID 0702034 is “US ARMY COE CHEM MTLs QUALITY ASSUR LAB” and is the former name for Environmental Chemistry Branch (ECB) Lab. The CERCLIS record includes a hazardous substance discovery on June 30, 1987, a Preliminary Assessment conducted by USEPA Region 7 completed October 20, 2005, and conclusion of No Further Remedial Action Planned (NFRAP) on October 20, 2005.

No other record of the incident was found. Interviews with several former Lab employees reveal no one recalled a hazardous substance release to environment (Appendix E). Two interviewees recall misplacing a container of cyanide, a CERCLA hazardous substance, about the time of the discovery noted in CERCLIS. In the 1980s, the lab was cleaning out its storerooms excess and expired chemicals. It had hired a contractor to collect, package, manifest, and dispose of the excess laboratory chemicals, some of which were hazardous waste by RCRA regulations. Among them was reportedly 500 grams of cyanide that was inventoried and identified for disposal that was not included on any of the hazardous waste manifests. Laboratory personnel searched the lab building to find the sodium cyanide though never did. Legal counsel took affidavits notified USEPA. USEPA concluded the hazardous substance was properly disposed.

The cyanide was packaged for disposal and disposed, but inadvertently omitted from the hazardous waste manifest paperwork.

Another interviewer observes that 1987 was about the time the Lab applied for an EPA ID number to manage the hazardous waste generated in the analytical laboratories, which consisted of the environmental samples it analyzed, extraction solvents, and reagents used for instrument calibrations. The application was a hazardous waste generator notification and the Lab was put on the Federal Docket when its notification was processed.

### **3.5.2 RCRA Permit Violations**

USEPA Region 7 performed an investigation of the former Lab in November 2005, in response to the 1987 discovery recorded in CERCLIS. The investigation was also a RCRA inspection, and several regulations violations are recorded in RCRAInfo. RCRAInfo is a national information system that supports the RCRA program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous wastes. RCRAInfo allow RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. CORPS OF ENGINEERS MISSOURI RIVER DIV is recorded as a Small Quantity Generator RCRA Permit holder under ID Number NE7210890029. The Lab's permit was issued and enforced by Nebraska Department of Environmental Quality Waste Management Division regulations, Title 128. The inspection cited twelve violations of Title 128 (Appendix B). The regulations cited in the RCRAInfo violations are summarized below.

- Four violations are related to universal waste lamp hazard identification, packaging, record-keeping, and labeling
- Three violations storing accumulated hazardous waste for greater than the 180 day limit for small quantity generators
- One violation for failing to post required emergency phone numbers
- One violation for non compliance with required permit applications, conditions, changes, or interim status
- Two violations for exceeding the limit on the amount of hazardous waste that may be accumulated before disposal
- One violation for incorrectly labeling containers of hazardous waste.

The former Lab was fined for two counts of operating a hazardous waste storage facility by storage lab waste for greater than 180 days. However, the Lab did not store hazardous wastes at the Lab building. The violations are the result of mislabeled satellite accumulation containers that were disposed since the date recorded on the container. On the day of the inspection, the Lab was unable to produce the documentation that demonstrated that hazardous laboratory waste was accumulated at satellite locations and disposed well within time limits prescribed by regulation. This date corresponds to the NFRAP date recorded in CERCLIS.

Based on interviews with key personnel, review of historical photos, and a search of various environmental databases, there is no indication of production, spills, or storage of hazardous substances on or in the vicinity of the investigated area.

### **3.6 Medical or Biohazardous Waste**

The target site was used as an auto sales and repair shop in the late 1920s and again in the late 1940s and since 1948 has been used as an environmental analytical laboratory. There are no indications of testing or use of medical or biohazardous substances that will produce biohazardous waste.

### **3.7 Pesticides and Herbicides**

Based on interviews with key personnel, review of historical photos, and a search of various environmental databases, there are no indications of Pesticides or Herbicide contamination. Some environmental samples were received by the laboratory for analysis of Pesticides and Herbicides however, these samples were received in sealed sample containers and only sample for analysis was removed. Any accidental spills were cleaned up at the table where the analyses were performed. Any samples remaining in the lab after closing were manifested and disposed according to environmental regulations. The target building has no associated grass so herbicides would not be used. Application of pesticides for insect control is possible, but applications would have followed strict manufactures' instructions. Proper application and use of these chemicals is not an environmental issue.

### **3.8 Radioactive Waste**

EDR Radius Map with Geo-Check®, Appendix B, Number 1, page 6, shows that the target site is on the Materials Licensing Tracking System (MLTS) list. The MLTS is maintained by the Nuclear Regulatory Commission and it contains a list of sites which possess or use radioactive materials and which are subject to NRC licensing requirements. The target site obtained the First License on 01/09/1984. The last inspection date was 08/1989. The license has since been terminated.

The first floor garage contained a cement cabinet with a steel door, see photograph Number 6 Appendix F. As-built drawings indicated that radioactive material was stored here, and interviewers explain the cabinet was used to store a soil densitometer used for down hole logging that contained an Americium source. Upon inspection, inside the cabinet was a lead shipping/storage container with a US Department of Transportation Yellow II label on its outer surface. The lead container was opened and found to be empty. A radiation survey conducted by the USACE health physicist revealed no elevated radioactivity readings in or on the container or the cabinet.

### **3.9 Wastewater Discharges**

A waste water treatment system consisting of a large tank that collects drain water from all the sinks on the fourth floor, fiberglass cylinders, and piping connecting them to the sanitary sewer system (See Photo # 7) is located on the third floor of the Lab building. The system was designed and installed at the same time as the fourth floor analytical laboratory, in the late 1980s, though was never operated. At the time, one interviewee reports, USACE management was concerned about the RCRA permitting requirements associated with operating a treatment system. Before

the lab began operation, management determined the RCRA hazardous waste treatment permitting requirements were too demanding to justify operation of a treatment system. In practice the tank was a flow through tank. However, it remained online to catch effluent in an emergency.

### **3.10 Ordnance**

There is no evidence of current or historical use of military ordnance or unexploded ordnance (UXO) or storage of UXO on the target site. No UXO inspection or analysis was performed at this laboratory. Environmental samples containing explosives chemicals were received in sealed sample containers for analysis under controlled conditions. Any samples remaining in the lab after closing were manifested and disposed of according to environmental regulations.

### **3.11 Petroleum**

The past use of the building includes the use as automobile dealerships where petroleum products would have been on the premise or used in business, however no records of storage, treatment, or disposal of petroleum products from the former businesses were found. Environmental database search and visual inspection indicate no spills or disposal occurred. Based on interviews with key personnel of the environmental laboratory, review of historical photos, and a search of various environmental databases, there are no indications of production, use, or storage of petroleum products at the Lab building.

Section 4.6 shows that there are or have been several underground storage tanks (USTs) in the vicinity of the Lab building. A petroleum UST may have been used by the automobile dealerships prior to U.S. Government ownership. Interviewees report that it was located west of the building under what is now a surface parking lot. The visual inspection shows underground utilities installed subsequent to paving the parking lot, but not piping or other evidence of a UST was observed. It may be abandoned in place or removed; no record of a UST closure was found. The EDR report does not identify a UST on the entire block occupied by the Lab building.

The visual inspection showed areas of petroleum product or grease spills visible on the floor associated with equipment in the building. These are discussed below:

- The building contains a large automobile-sized freight elevator guided by steel rails on each side of the elevator shaft. The motors have leaked considerable amounts of oil, which is pooled on the floor or in absorbent material. See photograph #1 in Appendix F. The grease and oil stains appear to be only on the concrete surface and are not an environmental hazard.
- The basement floor contains oil stains from the operation of a large press. The stains appear to be on the surface and should not be an environmental hazard. See photograph #2 in Appendix F.
- The basement floor contains an oil stain from the operation of an air compressor. Even though the stain is extensive it is not believed to have penetrated the floor and is not an environmental hazard. See photograph #3 in Appendix F.



- The basement contains a concrete rimmed sump area that contains extensive petroleum and rust stains from an air compressor on the floor next a floor drain. The floor appears intact and the stain should only be on the surface of the floor. See photograph #4 in Appendix F.

### **3.12 Solid Waste**

No records of disposal of solid waste were found. Solid, non-hazardous, waste was collected and disposed in a municipal waste landfill during operation of the laboratories.

### **3.13 Asbestos**

Building records and visual inspection indicate that asbestos abatement was performed on the basement and first floor in 1987 and 1988. The fourth floor, which was a storeroom at the time, was remodeled in the late 1980s into an analytical chemistry laboratory and there is no indication the presence of asbestos containing material (ACM). No records show that asbestos abatement has been performed on any other floors, but the age of the building indicates ACM is present.

### **3.14 Lead Based Paint**

A lead based paint (LBP) survey has not been performed at the Lab building. The paint used on the interior walls of the building date back to the time when lead based paint was used so it is assumed that paint containing lead is present on the walls. See photograph # 5 in Appendix F for a picture of the paint chipping from the wall and ceiling.

### **3.15 Radon**

A radon survey has not been performed at the Lab building. There are at present no regulations on permissible indoor radon levels, however, EPA recommends remediation for homes with an annual average radon concentration above 4 pCi/L, with the caveat that corrective action be taken above this level on a case-by-case basis. EDR Radius Map with Geo-Check®, Appendix B, Number 1, page A-109, shows state readings for Omaha at Zip Code 68102. Five sites within this area have been measured with values from 2.1 pCi/L to 6.7 pCi/L. Of these values only one was greater than the EPA recommendation of 4 pCi/L. Radon is a radioactive non chemical reacting element that is heavier than air so it will collect in low areas such as basements if cracks or other leaks are present in the foundation. The state database shows 123 sites tested with average basement readings of 6.9 pCi/L. The target site contains a basement area of 11,250 square feet and there are areas with wall cracks that could allow radon intrusion.

### **3.16 Polychlorinated Biphenyls (PCBs)**

Based on interviews with key personnel, review of historical photos, and a search of various environmental databases, there are no indications of polychlorinated biphenyls (PCB) contamination. Some environmental samples were received by the laboratory for analysis of PCBs, however, these samples were received in sealed sample containers and only sample for analysis was removed. Any accidental spills were cleaned up at the table where the analyses

were performed. Any samples remaining in the lab after closing were manifested and disposed of according to environmental regulations.

## **4 FINDINGS FOR ADJACENT PROPERTIES**

The EBS also includes a survey of the area surrounding the site within a 1 mile radius. The adjacent properties were searched by zip code and radius from the site (from a latitude/longitude at a central point of the site). The search was conducted to identify any facilities associated with the survey area or adjacent properties potentially impacting the survey area and federal or state environmental lists regulated by CERCLA, RCRA, or the Solid Waste Disposal Act. The lists were searched through EDR Inc (see Appendix B).

### **4.1 Omaha Lead (National Priority List (NPL) Site)**

Omaha Lead Facility (intersection of I 480 and Abbott Drive) is 1 mile to the northeast of the target property, see Overview Map ID 108 and page 58 of EDR Radius Map with Geo-Check®, EDR Inc., Appendix B, Number 1. The Omaha Lead Facility consisted of two former lead processing facilities: American Smelting and Refining Company, Inc. (ASARCO) and Gould, Inc. The area contaminated by lead-containing particulates released to the air from their smokestacks encompasses much of downtown Omaha. On the basis of sampling, the focus area of the site includes an area of approximately twenty square miles (12800 acres) bounded by Ames Avenue to the north, L Street to the south, 45th Street to the west, and the Missouri River to the east. The target property at 420 South 18 th Street is within this area, however, since this is an enclosed building the lead fallout should have no effect on the target property.

### **4.2 CERCLIS-NFRAP Properties**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, shows three properties within ½ miles of the target property that have been placed on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list, but investigation by USEPA Region 7 concluded No Further Remedial Action Planned (NFRAP). The three properties have subsequently been removed from the CERCLIS list. The properties are:

Blazek, Don Auto Parts	1020 S 20th Street
Celltile Co	803 S 15th Street
Inland Manufacturing Co	1108 Jackson Street.

### **4.3 Union Pacific Railroad Co**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies this site as having a possible human exposure to contaminated groundwater. The migration of contaminated groundwater has been verified as under control and that monitoring will be conducted to confirm that contaminated groundwater remains within the present area. Union Pacific Railroad Co. is within approximately 1 mile of the target site.

### **4.4 RCRAInfo Sites**

EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies 8 companies on the RCRAInfo list. The data base shows selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. This list shows 8 companies within ¼ mile of the target site as small quantity generators, generating between 100 kg and 1,000 kg of hazardous waste per month. The companies are:

US West Communications	1819 Farnam Street
The Renze Co Inc.	2023 Harney Street
MB Wilder Co	2024 St Marys Ave
Max I Walker	2055 St Marys Ave
American Tel AT & T Tech	118 S 19th Street
US West Communications	118 S 19th Street
Redfield & Company, Inc.	1901 Howard Street
Omaha Police Department	505 S 15th Street.

Even though these companies are on this list there was no indication that their activities would or have affected the target site.

#### **4.5 Solid Waste Facility/Landfill**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies one landfill within 1/2 miles of the target property. The landfill is located on 20th and Howard Street. No information is present that would indicate any effect on the target site.

#### **4.6 Underground Storage Tanks**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies twenty USTs within one-quarter mile of the Lab building. Of the UST sites listed only three are listed as high risk sites under present remediation or investigation. These three are:

Town and Country MAR	2431 Farnam St	2052 feet West-northwest
Metropolitan Utilities Facility	1723 Harney St	294 feet East-northeast
Safeway Cabs Inc	802 S 14th St	2043 feet Southeast

The other listings show that no further actions are proposed or no information on the USTs is available. Records show no indication that these sites would affect the target site.

#### **4.7 Dry Cleaning Facilities**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies two dry-cleaning facilities within 1/4 mile of the target site. Max I Walker Cleaners is located at 2055 Saint Marys Ave. This facility is a Small Quantity Generator and no violations have been found. One Hour Martinizing is located at 112 North 18th Street, and no listings of violations have been recorded.

#### **4.8 Manufactured Gas Plant**

The EDR Radius Map with Geo-Check®, Appendix B, Number 1, identifies one gas manufacturing plant within 1 mile of the target site. Omaha Gas Manufacturing Company is located on the northeast corner of 12th and Leavenworth. These types of facilities were in use from 1880 until into the 1950s and they used whale oil, rosins, or mixtures of coal, oil, and water for gas production. In many cases the oily by-products were left on site. There is no history of the disposal practices of this facility.

#### **4.9 Domestic Source Wells**

EDR Radius Map with Geo-Check®, Appendix B, Number 1 identifies over 100 water wells within the 1 mile area of the target site. No well is associated with the site.

## **5 SUMMARY AND CONCLUSIONS**

### **5.1 Adjacent Property**

Section 4 shows several facilities within a 1 mile area of the target property. Some of the surrounding facilities have differing records of compliance issues. Some compliance issues have been corrected but some are still in non compliance. None of the surrounding facilities' issues appear to have any effect of the target property at 420 south 18th street.

### **5.2 Target Property**

Since the Lab building was constructed in 1920 it has been an auto dealership for two separate owners and since 1948 has been an environmental analytical laboratory. In the process of laboratory operation containerized environmental samples have been submitted to the laboratory for analysis. The samples were logged in at the laboratory and a custody paper trail followed the samples until properly disposed. Reagents and extraction chemicals have been used at the laboratory in the various analytical analyses. Laboratory wastes including environmental samples, reagents, and extraction solvents were accumulated and disposed as hazardous waste.

Section 3.8 shows that the former Lab is on the MLTS list, indicating that it has possessed or used radioactive material and which are subject to NRC licensing requirements. This license has been terminated and the equipment containing sealed radioactive sources removed.

There is no indication that petroleum products or their derivative have been stored, released, or disposed on the property. Section 3.11 shows four areas of the site that have indication of petroleum product stains on the floor. The areas are minimal and could be efficiently cleaned up with no resulting hazards. No record or evidence of a petroleum UST associated with the former automobile dealerships were found.

The building was constructed several years before the use of LBP and ACM were prohibited in construction. An asbestos abatement has been performed in the building basement. LBP and ACM can be assumed present throughout the building.

### **5.3 Environmental Condition of Property**

Per ASTM D 6008-96 (Standard Practice for Conducting Environmental Baseline Surveys) the EBS is used to gather information in order to classify the property environmental conditions. The property is placed into one of seven types regarding the presence of CERCLA hazardous substances [42 U.S.C. section 9601 (14)] or petroleum products or their derivatives:

- Type 1: No release or disposal. Parcels of real property where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred, including no migration of these products from adjacent properties.
- Type 2: Only release or storage of petroleum products occurred. Parcels of real property where only release or disposal of petroleum products or their derivatives has occurred.

- Type 3: Contamination below action levels. Parcels of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but at concentrations that do not require a removal or remedial action.
- Type 4: Remedial action required and taken. Parcels of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial actions necessary to protect human health and the environment have been taken.
- Type 5: Remedial or other action underway. Parcels of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required actions have not yet been taken.
- Type 6: Required response action not implemented. Parcels of real property where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- Type 7: Further evaluation required. Parcels of real property that is unevaluated or requires additional evaluation.

Based on observation and available information, the site has been categorized according to the definitions provided in ASTM D 5746-98 (2002) and the ECP for the Lab building is Type 1, no release or disposal of hazardous substances or petroleum products or their derivatives has occurred.

## CERTIFICATIONS

### Certification of the Environmental Baseline Survey

The USACE has reviewed all appropriate records made available, and conducted visual site inspections of the selected facilities following an analysis of information during the record search. The information contained within the survey report is based on records made available and, to the best of our knowledge, is correct and current as of February 2007.

Certified by: Marc Anderson  
Marc Anderson, Environmental Professional

28 Feb 07  
Date

Approved by: Thomas F. Zink  
Thomas F. Zink, Project Manager

28 Feb 07  
Date